USSN: 09/509,591

Of docket number 34802/3000920) and U.S. Ser. No. 60/054,523).

Following the Claims, please add the following:

-- ABSTRACT OF THE INVENTION

 C_{γ}

Replication competent adenoviral vectors specific for cells expressing alfa-fetoprotein (AFP) are provided. These replication-competetent adenoviral vectors comprise adenovirus genes essential for replication under the transcriptional control of an AFP-transcriptional regulatory element.--

IN THE CLAIMS

Please replace the pending claims with the correspondingly numbered claims below. Claims amended herein are noted by the text in parentheses. Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment; captioned "VERSION WITH MARKINGS TO SHOW CHANGES MADE."

Please cancel claims 73-75, 85-87 and 94.



- 71. (amended) A method for conferring selective cytotoxicity on a target cell, said method comprising contacting a cell which allows an α fetoprotein transcription regulatory element (AFP-TRE) to function with an adenovirus vector comprising more than one adenovirus gene essential for viral replication under transcriptional control of an AFP-TRE whereby the vector enters the cell and replicates.
- 72. (amended) The method of claim 71, wherein the adenovirus gene essential for replication is selected from the group consisting of E1A, E1B and E4.
- 76. (amended) The method of claim 71, wherein the AFP-TRE comprises an enhancer presented as nucleotides from about 1 to about 300 of SEQ ID NO:1.



- 77. (amended) The method of claim 71, wherein the AFP-TRE comprises an enhancer presented as nucleotides from about 300 to about 600 of SEQ ID NO:1.
- 78. (amended) The method of claim 71, wherein the AFP-TRE comprises an enhancer presented as nucleotides from about 1 to about 600 of SEQ ID NO:1.



- 79. (amended) The method of Claim 71, wherein said AFP-TRE further comprises a promoter from an AFP gene presented as nucleotides from about 600 to about 822 of SEQ ID NO:1.
 - 80. (amended) The method of claim 71, wherein the AFP-TRE comprises SEQ ID NO:1.
 - 81. (amended) The method of claim 71, wherein the AFP-TRE comprises SEQ ID NO:2.
- 82. (amended) The method of claim 71, wherein the adenovirus vector comprises more than one adenovirus genes essential for replication under transcriptional control of the same AFP-TRE.
- 83. (amended) A method of suppressing tumor growth in an individual having an AFP-expressing tumor, comprising contacting the tumor cells with an adenovirus vector comprising more than one adenovirus gene essential for replication under transcriptional control of an AFP-TRE, whereby the adenoviral vector transfects the tumor cells and replicates.
- 84. (amended) The method of claim 83, wherein the more than one adenovirus gene essential for replication is selected from the group consisting of E1A, E1B and E4.
- 88. (amended) The method of claim 83, wherein the AFP-TRE comprises an enhancer presented as nucleotides from about 1 to about 300 of SEQ ID NO:1.
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- 89. (amended) The method of claim 83, wherein the AFP-TRE comprises an enhancer presented as nucleotides from about 300 to about 600 of SEQ ID NO:1.
- 90. (amended) The method of claim 83, wherein the AFP-TRE comprises an enhancer presented as nucleotides from about 1 to about 600 of SEQ ID NO:1.
- 91. (amended) The method of claim 83, wherein the AFP-TRE further comprises a promoter from an AFP gene presented as nucleotides from about 600 to about 822 of SEQ ID NO:1.
 - 92. (amended) The method of claim 83, wherein the AFP-TRE comprises SEQ ID NO:1.
 - 93. (amended) The method of claim 83, wherein the AFP-TRE comprises SEQ ID NO:2.

Please add new claims 98-101.

98. (new) The method of claim 71, wherein said adenovirus vector comprises a silencer.

99. (new) The method of claim 71, wherein said adenovirus vector comprises genetic sequences encoding GM-CSF.

100. (new) The method of claim 83, wherein said adenovirus vector comprises a silencer.

101. (new) The method of claim 83, wherein said adenovirus vector comprises genetic sequences encoding GM-CSF.

REMARKS

In view of the above amendments and the following remarks, the Examiner is respectfully requested to withdraw the rejections, and allow claims 71-72, 76-84, 88-93 and 98-101, the currently pending claims. Claims 73-75, 85-87 and 94 have been canceled, without prejudice to refiling. Claims 71-72, 76-84, 88-93 have been amended. Claims 98-101 are added. No new matter is added.

Support for the amending language of Claims 98 and 100 may be found in the specification on page 22, lines 22-24. Support for the amending language of Claims 99 and 101 may be found in the specification on page 30, lines 22-25 and on page 31, lines 12-15. Page 6, line 1, has been amended to correctly state the length of the AFP-TRE provided in SEQ ID NO:1, which comprises 822 nucleotides.

The informalities noted by the Examiner in the specification have been corrected. A substitute Declaration will be provided upon indication of allowance of the application.

Claims 82 and 94 have been rejected under the judicially created doctrine of obviousness type double patenting over Claims 35 and 37 of U.S. Patent no. 6,254,862. Without conceding to the correctness of the rejection, Applicants agree to provide a terminal disclaimer upon indication of allowability of the subject claims.

Claims 71-75, 79, 83-87 and 91 have been rejected under 35 U.S.C. 102(e) as anticipated